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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,057	08/21/2003	Marcia L. Stockton	RSW920030109US1	6536

23550 7590 05/11/2007  
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EXAMINER
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TRAN, TUYETLIEN T

ART UNIT	PAPER NUMBER
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2179

MAIL DATE	DELIVERY MODE
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05/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/645,057	<b>Applicant(s)</b> STOCKTON, MARCIA L.	
	<b>Examiner</b> TuyetLien (Lien) T. Tran	<b>Art Unit</b> 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to the following communication: Amendment filed 03/14/07.

**This action is made final.**

2. Claims 1-20 are pending in the case. Claims 1, 10, 12 and 17 are independent claims. Claims 1, 2, 10, 12, 17 are amended claims.

### *Claim Objections*

3. Claims 1, 10, 12 and 17 are objected to because of the following informalities: the term "intereface" recited in line 3, 5, 4 and 5 of claims 1, 10, 12, 17 respectively, should be changed to "interface". Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 12-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**As to claim 12**, a "system" is being recited; however, it appears that the system would reasonably be interpreted by one of ordinary skill in the art as software, per se. The only element positively recited as part of the system is the "communication system". Applicant's specification provides no explicit and deliberate definition of the communication system, and it appears that such would reasonably be interpreted as representative of the software that obtains data transmitted through the communication link (e.g., see Applicant's [0024]). In addition, the Applicant's specification states that "the system can be realized in hardware,

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software, or a combination of hardware and software" (e.g., see Applicant's [0039]); therefore, the system without any hardware component included is interpreted as software by itself.

Applicants' argument and amendment regarding claim 17 is persuasive; therefore the rejection on claims 17-20 is withdrawn.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 12, 14, 16-17, and 19 rejected under 35 U.S.C. 102(a) as being anticipated by Ohsugi et al. (published article, 'A Recommendation System for Software Function Discovery' APSEC 2002 pages 248-257, hereinafter Ohsugi).

***As to claim 12***, Ohsugi teaches:

A system for customizing a user interface (e.g., system for software users, see page 249 left column and see Fig. 3 on page 251; note that the recommendation system helps improving a user's productivity in using application software, see Abstract), the system comprising:

a definition system for defining the group of users (e.g., group of users A-D, see Fig. 2 on page 250);

a communication system for obtaining a use count for a user interface element for each user in a group of users (e.g., each user's usage history is sent to usage history server, see Fig.

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2 on page 250; note usage history A-D are stored at the server and can be used to calculate all user's summarized usage history, see Fig. 2 and Fig. 3 on page 250-251); and

a calculation system for calculating a use weight for the user interface element with respect to another user interface element based on the use counts for the group of users (e.g., calculating all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B").

**As to claim 17**, claim 17 reflects a program product stored on a computer readable medium for customizing a user interface (e.g., see Fig. 2 on page 250 and Fig. 3 on page 251), which when executed performing the steps as recited in claim 12 and is rejected along the same rationale.

**As to claims 14 and 19**, Ohsugi teaches further comprising a recordation system for recording the use count for each user (e.g., usage history collector, see Fig. 2 in page 250).

**As to claim 16**, Ohsugi further teaches wherein the communication system further communicates the use weight to a user device for each user (e.g., recommendation for user A, see Fig. 3 on page 251).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-11, 13, 15, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsugi in view of Arcuri et al (Patent No 6121968, hereinafter Arcuri).

***As to claim 1***, Ohsugi teaches:

A method of customizing a user interface (e.g., system for software users, see page 249 left column and see Fig. 3 on page 251; note that the recommendation system helps improving a user's productivity in using application software, see Abstract), the method comprising:

recording a use count for a user interface element for each user in a group of users (e.g., each user's usage history as shown in Fig. 3 on page 251);

obtaining a use weight for the user interface element with respect to another user interface element based on the use counts for the group of users (e.g., all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B");

Ohsugi further teaches recommendation for users a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach modifying the user interface element. Arcuri, though, teaches automatically modifying the user interface element based on control usage (e.g., dynamically changing the available commands in a given short menu based upon the particular needs and utilization behavior of a user, see col. 2 lines 10-30).

It would have been obvious to one of ordinary skill in the art having the teachings of Ohsugi and Arcuri before him at the time the invention was made to have combined the two teachings together to automatically modify user interface elements based on use weight in order to present commands to users that are useful without being confusing for the purpose of

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improving the user's productivity in using application software (see Ohsugi page 248 right column lines 13-20).

***As to claim 10***, Ohsugi teaches:

A method of customizing a user interface (e.g., a recommendation system based on a collaborative filtering approach to let users discover useful functions, see page 248 right column lines 13-16), the method comprising:

defining a group of users to include a plurality of users (e.g., group of users A-D, see Fig. 2 on page 250);

associating a server with the group of users (e.g., usage history server, see Fig. 2 on page 250);

obtaining a use count for a user interface element for each user in the group of users at the server (e.g., usage history A-D are stored at the server and can be used to calculate all user's summarized usage history, see Fig. 2 and Fig. 3 on page 250-251);

calculating a use weight for the user interface element with respect to another user interface element based on the use counts for the group of users at the server (e.g., all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B").

Ohsugi further teaches recommendation for users a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach modifying the user interface element. Arcuri, though, teaches automatically modifying the user interface element based on control usage (e.g., dynamically changing the available commands in a given short menu based upon the particular needs and utilization behavior of a user, see col. 2 lines 10-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

**As to claim 2**, Ohsugi and Arcuri teach the limitations of claim 1 for the reasons as discussed with respect to claim 1 above. Ohsugi further teaches defining the group of users to include a plurality of users that user an application having the user interface element for a given job function (e.g., group of users A-D, see Fig. 2 on page 250; note that each user's usage history is for a particular application software, see page 250 left column; further note that each element is associated with a job function such as Function A-E or Formatting->Font, see page 250 left column and Fig. 3 on page 251); and associating a server with the group of users (e.g., usage history server, see Fig. 2 on page 250).

**As to claim 3**, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. Ohsugi further teaches obtaining the use count from each user at the server (e.g., usage history A-D are stored at the server and can be used to calculate all user's summarized usage history, see Fig. 2 and Fig. 3 on page 250-251). However, Ohsugi does not expressly teach resetting the use count for each user. Arcuri, though, teaches resetting the use count for each user (e.g., the historical usage record can be deleted if the usage count field is decremented to a prescribed number of usage count, see col. 3 lines 25-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

**As to claim 4**, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. Ohsugi further teaches requesting the use count from each user (e.g., see Fig. 2 on page 250).

**As to claim 5**, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. Ohsugi further teaches obtaining the use weight from



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the server at each user (e.g., calculating all user's summarized usage history, see Fig. 3 on page 251).

**As to claim 6**, Ohsugi and Arcuri teach the limitations of claim 2 for the reasons as discussed with respect to claim 2 above. However, Ohsugi does not expressly teach requesting the use weight from the server during initialization of the application. Arcuri, though, teaches requesting the use weight from the server during initialization of the application (e.g., see step 600 and 610 in Fig. 6). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

**As to claim 7**, Ohsugi and Arcuri teach the limitations of claim 1 for the reasons as discussed with respect to claim 1 above. Ohsugi further teaches wherein the use weight comprises one of: a neutral value, a positive likelihood value, and a negative likelihood value (e.g., all user's summarized usage history of 2 or 8%, 4 or 33%, 1 or 8, see Fig. 3 on page 251).

**As to claim 8**, Ohsugi and Arcuri teach the limitations of claim 7 for the reasons as discussed with respect to claim 7 above. Ohsugi further teaches wherein the use weight comprises a byte (e.g., numerical number such as 4, 2, 3, and 1 as shown in Fig. 3 on page 251).

**As to claims 13 and 18**, Ohsugi teaches the limitations of claims 12 and 17 for the reasons as discussed with respect to claims 12 and 17 above. Ohsugi further teaches recommendation for user a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach modifying the user interface element for each user in the group of users based on the use weight. Arcuri, though, teaches modifying the user interface element for each user in the group of users based on control usage

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(e.g., the short menu may be adapted to the personal needs of the user when the user selects commands from the long menu which are not contained in the short menu, see col. 2 lines 23-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

**As to claims 9, 15 and 20**, Ohsugi and Arcuri teach the limitations of claims 1, 12 and 17 for the reasons as discussed with respect to claims 1, 12 and 17 above. Ohsugi further teaches recommendation for user a list of useful functions based on use weight (see page 251 right column lines 9-13); however, Ohsugi does not expressly teach configuring the user interface element to incorporate use data. Arcuri, though, teaches configuring the user interface element to incorporate use data (e.g., the short menu may be adapted to the personal needs of the user when the user selects commands from the long menu which are not contained in the short menu, see col. 2 lines 23-30). Thus, combining Ohsugi and Arcuri would meet the claimed limitation for the same reason as discussed in claim 1.

**As to claim 11**, Ohsugi and Arcuri teach the limitations of claim 10 for the reasons as discussed with respect to claim 10 above. Ohsugi further teaches

recording the use count at a user device for each user (e.g., usage history collector, see Fig. 2 in page 250);

communicating the use count from each user device to the server (e.g. each user's usage history is sent to the usage history server, see Fig. 2 and page 250 left column lines 34-40); and

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communicating the use weight from the server to each user device (e.g., sending recommendation to user A, see Fig. 3 on page 251).

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-20 have been considered but are not persuasive.

Applicants argue that the 101 rejection is not proper because Applicant's original specification specifically states that: "the present invention can be realized in hardware, software, or a combination of hardware and software" (e.g., see Applicants remarks page 6, Para 3).

The Examiner maintains the 101 rejection on claims 12-16 because the system recited in claim 1 would reasonably be interpreted by one of ordinary skill in the art as software, per se. The only element positively recited as part of the system is the "communication system". Applicant's specification provides no explicit and deliberate definition of the communication system, and it appears that such would reasonably be interpreted as representative of the software that obtains data transmitted through the communication link (e.g., see Applicant's [0024]). In addition, it is noted that the features upon which applicant relies (i.e., hardware) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants argue that the prior art of Oshugi fails to teach calculating a user weight for the user interface element with respect to another user interface element based on the use

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counts for the group of user (e.g., see Applicants remark page 7 lines 11-15 and page 8 lines 13-16).

The Examiner disagrees

The prior art of Oshugi clearly teaches calculating a user weight for the user interface element with respect to another user interface element based on the use counts for the group of user (e.g., all user's summarized usage history, see Fig. 3 on page 251; note that the use weight for the element "Function A" is calculated with respect to other user interface elements such as "Function B"; for example, the use weight for Function A has the value of 4 or 33% with respect to the user weight for Function B which has the value of 2 or 16%).

Applicants argue that the prior art of Oshugi and Arcuri fail to teach a group of users that user a particular application for a given job function (e.g., see Applicants remark page 8 lines 17-21).

The Examiner disagrees

The prior art of Oshugi teaches that each user's usage history is for a particular application software and that each user's usage history for a particular application software is collected and sent to usage history server to find useful functions for individual user, see page 250 left column and Fig. 2. Oshugi further teaches each element is associated with a job function such as Function A-E or Formatting->Font, see page 250 left column and Fig. 3 on page 251.

### ***Conclusion***

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

**It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuyetLien (Lien) T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00 (every other Friday off).

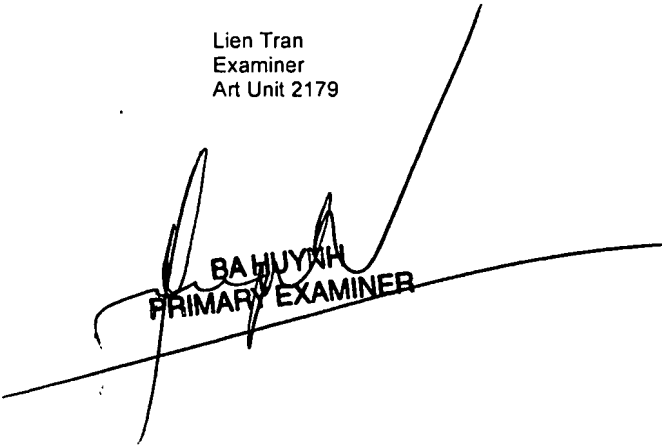
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T.T  
5/8/2007

Lien Tran  
Examiner  
Art Unit 2179

  
BA HUYNH  
PRIMARY EXAMINER